

Title (en)  
ENERGY STORAGE SYSTEM

Title (de)  
ENERGIESPEICHERSYSTEM

Title (fr)  
SYSTÈME DE STOCKAGE D'ÉNERGIE

Publication  
**EP 4152547 A1 20230322 (EN)**

Application  
**EP 22190242 A 20220812**

Priority  
CN 202111085638 A 20210916

Abstract (en)  
An energy storage system (1) is provided. The energy storage system (1) includes a plurality of battery clusters (11), a plurality of power regulators (12), a transformer (13), and a central controller (14). The plurality of power regulators (12) is configured to control charging and discharging of the plurality of battery clusters (11). Each power regulator (12) is electrically coupled to corresponding two, at most, of the plurality of battery clusters (11). A first terminal of the transformer (13) is electrically coupled to the plurality of power regulators (12), and a second terminal of the transformer (13) is electrically coupled to the power grid (2). The central controller (14) is coupled to the plurality of power regulators (12) and the plurality of battery clusters (11) for controlling the plurality of power regulators (12) and the plurality of battery clusters (11). The central controller (14) is in communication with the plurality of power regulators (12) through optical fibers, and a data transmission rate of the optical fibers is greater than 1Mbit/s.

IPC 8 full level  
**H02J 3/32** (2006.01); **H02J 3/38** (2006.01); **H02J 7/00** (2006.01); **H02J 13/00** (2006.01)

CPC (source: EP US)  
**H02J 3/32** (2013.01 - EP US); **H02J 3/381** (2013.01 - EP US); **H02J 7/0013** (2013.01 - EP US); **H02J 7/00304** (2020.01 - US); **H02J 7/007** (2013.01 - US); **H02J 7/02** (2013.01 - US); **H02J 13/00017** (2020.01 - EP); **H02J 2207/20** (2020.01 - US); **H04B 10/25** (2013.01 - US); **Y02E 70/30** (2013.01 - EP)

Citation (search report)

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- [A] US 2021083505 A1 20210318 - BEASTON VIRGIL LEE [US]
- [A] CN 106505605 A 20170315 - STATE GRID SHANGHAI MUNICIPAL ELECTRIC POWER CO, et al
- [A] LU 93357 B1 20170531 - ANXI ZHONGLEI EQUIPMENT MFG CO LTD [CN]
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Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

Designated validation state (EPC)  
KH MA MD TN

DOCDB simple family (publication)  
**EP 4152547 A1 20230322**; AU 2022215316 A1 20230330; CN 115833192 A 20230321; JP 2023043838 A 20230329; TW 202315270 A 20230401; US 2023081860 A1 20230316

DOCDB simple family (application)  
**EP 22190242 A 20220812**; AU 2022215316 A 20220812; CN 202111085638 A 20210916; JP 2022120868 A 20220728; TW 111127372 A 20220721; US 202217886890 A 20220812